

09/694,701

WEST

## Freeform Search

**Database:**  US Patents Full-Text Database  US Pre-Grant Publication Full-Text Database  JPO Abstracts Database  EPO Abstracts Database  Derwent World Patents Index  IBM Technical Disclosure Bulletins

**Term:**

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## Search History

**DATE:** Tuesday, June 04, 2002 [Printable Copy](#) [Create Case](#)

<u>Set Name</u>	<u>Query</u>	<u>Hit Count</u>	<u>Set Name</u>
<u>side by side</u>			<u>result set</u>
<i>DB=USPT,JPAB,EPAB,DWPI; PLUR=YES; OP=ADJ</i>			
<u>L6</u>	noni	92	<u>L6</u>
<u>L5</u>	L4 and (substrate\$1 or solid support\$1)	7	<u>L5</u>
<u>L4</u>	L3 and ((nucleic acid\$1 or protein\$1 or polypeptide\$1) near5 air near5 dry\$)	7	<u>L4</u>
<u>L3</u>	elisa	21664	<u>L3</u>
<u>L2</u>	L1 and (nucleic acid\$1 or protein\$1 or polypeptide\$1)	1	<u>L2</u>
<u>L1</u>	air near5 dry\$ near5 (attach\$ or adsorpt\$) near5 (solid support\$1 or substrate\$1)	9	<u>L1</u>

END OF SEARCH HISTORY

**Search Results - Record(s) 1 through 7 of 7 returned.**

- 
1. 6322976. 17 Mar 99; 27 Nov 01. Compositions and methods of disease diagnosis and therapy. Aitman; Timothy J., et al. 435/6; 435/7.23 536/23.1 536/24.3 536/24.31. C12Q001/68 G01N033/574 C07H021/02 C07H021/04 C07H021/00.
- 
2. 6316607. 07 Jun 95; 13 Nov 01. Electrochemiluminescent assays. Massey; Richard J., et al. 536/22.1; 435/6 536/23.1 536/25.3. C12Q001/68 C07H019/00 C07H021/00 A01N055/02.
- 
3. 6264948. 08 Dec 98; 24 Jul 01. Methods and compositions for inhibiting tumor cell growth. Wong; David T. W., et al. 424/130.1; 424/145.1 424/152.1 424/153.1 424/155.1 530/350 530/351 530/380 530/386 530/387.1. A61K039/395 A61K035/14 C07K001/00 C07K014/00 C07K017/00.
- 
4. 6001357. 27 Aug 98; 14 Dec 99. Method of enhancing wound healing with anti-IL-5 antibody. Wong; David T. W., et al. 424/145.1; 424/130.1 424/141.1 424/152.1 424/158.1 424/172.1 530/387.1 530/388.1 530/388.2 530/388.23 530/388.7. A61K039/395 C07K016/24.
- 
5. 5578577. 06 Jun 95; 26 Nov 96. Method for storing labile proteins. Ching; Shanfun, et al. 514/21; 422/56 422/59 422/70 435/7.92 435/975 436/501 436/518 514/970 530/350 530/360 530/367 530/373. A61K038/00 C07K001/00 G01N033/543.
- 
6. 4970144. 02 Sep 86; 13 Nov 90. Peptide fragments of human apolipoprotein, type-specific antibodies and methods of use. Fareed; George, et al. 435/5; 435/7.93 435/7.94 435/810 436/518 436/536 436/545 436/546 436/547 436/823 530/327 530/328 530/387.9 530/389.3 530/391.3 530/807. G01N033/532 G01N033/543 G01N033/68 G01N033/92.
- 
7. 4891319. 07 May 87; 02 Jan 90. Protection of proteins and the like. Roser; Bruce J.. 435/188; 424/278.1 435/176 435/178 435/6 435/7.24 435/7.92 436/530 436/531 530/350 530/380 530/387.1 530/388.1 530/802 530/830 536/102 536/112 536/56. C12N009/96.
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Term	Documents
SUBSTRATE\$1	0
SUBSTRATE.DWPI,EPAB,JPAB,USPT.	1354527
SUBSTRATEA.DWPI,EPAB,JPAB,USPT.	19
SUBSTRATEB.DWPI,EPAB,JPAB,USPT.	1
SUBSTRATEC.DWPI,EPAB,JPAB,USPT.	1
SUBSTRATED.DWPI,EPAB,JPAB,USPT.	1179
SUBSTRATEE.DWPI,EPAB,JPAB,USPT.	56
SUBSTRATEF.DWPI,EPAB,JPAB,USPT.	3
SUBSTRATEG.DWPI,EPAB,JPAB,USPT.	1
SUBSTRATEL.DWPI,EPAB,JPAB,USPT.	33
SUBSTRATEM.DWPI,EPAB,JPAB,USPT.	22
(L4 AND (SUBSTRATE\$1 OR SOLID SUPPORT\$1)).USPT,JPAB,EPAB,DWPI.	7

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L2: Entry 1 of 1

File: USPT

Apr 23, 2002

DOCUMENT-IDENTIFIER: US 6376619 B1

TITLE: High density, miniaturized arrays and methods of manufacturing same

Brief Summary Paragraph Right (16):

The methods of manufacture of the present invention are amenable to mass production. The methods of manufacture of the present invention may be employed to increase the efficiency of current methods of manufacture of arrays to achieve high densities of reactants. The methods of the present invention are particularly useful in achieving high-density nucleic acid arrays wherein different nucleic acids are located at different sites on the substrate.

Detailed Description Paragraph Right (4):

"Analyte" shall mean a molecule, compound, composition or complex, either naturally occurring or synthesized, to be detected or measured in or separated from a sample of interest. Analytes include, without limitation, proteins, peptides, amino acids, fatty acids, nucleic acids, carbohydrates, hormones, steroids, lipids, vitamins, bacteria, viruses, pharmaceuticals, and metabolites.

Detailed Description Paragraph Right (10):

"Reactant" shall mean any chemical molecule, compound, composition or complex, either naturally occurring or synthesized, that is capable of binding an analyte in a sample of interest either alone or in conjunction with a molecule or compound that assists in binding the analyte to the substrate, such as, for example, a coenzyme. The reactants of the present invention are useful for chemical or biochemical measurement, detection or separation. Accordingly, the term "Reactant" specifically excludes molecules, compounds, compositions or complexes, such as ink, that do not bind analytes as described above. Examples of reactants include, without limitation, amino acids, nucleic acids, including oligonucleotides and cDNA, carbohydrates, and proteins such as enzymes and antibodies.

Detailed Description Paragraph Right (36):

The type of reactant used in the present invention will vary according to the application and the analyte of interest. For example, when characterizing DNA, oligonucleotides are preferred. When conducting diagnostic tests to determine the presence of an antigen, antibodies are preferred. In other applications, enzymes may be preferred. Accordingly, suitable reactants include, without limitation, amino acids, nucleic acids, including oligonucleotides and cDNA, carbohydrates, and proteins such as enzymes and antibodies.

Detailed Description Paragraph Right (37):

With reference to FIG. 2, in a preferred embodiment, a variety of nucleic acids, such as oligonucleotides 18 (an oligonucleotide being denoted by a letter) are affixed to the substrate 12 at separate binding sites 16. The variety of oligonucleotides 18 on the substrate 12 permits a large number of potential binding events between reactants and target analytes in a sample.

Detailed Description Paragraph Right (59):

A 5 cm.times.5 cm section of the polyethylene shrink film prepared as described above was immersed in a solution (5% solids, methylethylketone, 25 ml) containing a copolymer of vinyldimethyl azlactone/dimethylacrylamide (60/40 wt/wt), prepared by typical solution polymerization method well-known in the art, such as that described in U.S. Pat. No. 4,304,705, incorporated herein by reference. The solution was gently agitated for 2 hours at room temperature. The polyethylene film was removed from this solution, washed with MEK (15 minutes) and allowed to air dry, thus generating a

substrate including covalently attached linking agents.

Detailed Description Paragraph Right (97):

The procedure of Guo et. al. (Nucleic Acids Research, 1994, Vol. 22, No. 24) was used to prepare a reactive surface on a glass microscope slide. A slide treated with aminopropyltrimethoxy silane (Newcomer Supply, Middletown, Wis.) was immersed in 1,4 phenylene diisothiocyanate (0.2% solution in 1:9 pyridine:dimethylformamide). After two hours, the slide was rinsed with methanol (2.times.) and acetone (2.times.) followed by air drying. Two sections (1 inch by 1 inch) of shrink film coated with azlactone/dimethylacrylamide copolymer as described in Example 11c were used in the subsequent steps.

Other Reference Publication (2):

Article: Guo et al., "Direct Fluorescence Analysis of Genetic polymorphisms by Hybridization with Oligonucleotide Arrays on Glass Supports," Nucleic Acids Research, vol. 22, No. 24 (1994) pp. 5456-5465.

CLAIMS:

12. The array of claim 1 wherein said reactant is selected from the group consisting of nucleic acids, proteins, and carbohydrates.